How does the 4 Rivers Lottery work, technically?

Customers apply to the lottery through the Web during the application period. A customer can submit only one application to **each** river's lottery. After the lottery application deadline, the system triggers the lottery execution process at a date and time specified in the lottery execution setup.

The Lottery execution process is made up of multiple numbers of process threads. These process threads are run on the company's production servers which serve as execution nodes. At a given time, more than 40 process threads would be involved in processing lottery applications.

The execution of the lottery starts at a specified time. Each process thread would randomly pick up a lottery application from the pile of lottery applications entered in to the system. Process threads use the standard java randomizer to retrieve a random application.

Within a process thread, the picked up lottery application will be validated to make sure the application is not in violation of any configured business rules. (Example: a rule such as 'maximum number of reservations awarded for a customer'.) If the application is not in violation of the business rules, system will go through the Lottery preferences specified in the lottery application.

The system will first try to satisfy the preferred (or the first) lottery date choice provided by the customer. If the preferred choice is not available, system will continue to look for availability by checking the alternative launch date choices provided in the lottery application in the order specified.

If a date is available for any of the choices, system will reserve the first available requested launch date and will generate a permit reservation (successful). If the dates are not available for any of the requested lottery preferences, the lottery application will end up in the unsuccessful status.

As the lottery execution is performed using multiple numbers of process threads which has a randomizer on each one of the threads, the randomness of picking the applications for processing becomes extremely random, resulting in a fair lottery execution for the general public.

After the execution, system freezes the lottery results from the general public for a set number of days. During this period, the lottery execution will be reviewed by the River's Lottery Management personnel, and the results will be screened for invalid applicants (duplicates, no-shows, late cancellation penalties).

Once the lottery execution results are validated, the results will be released to the general public at the end of the lottery freeze period. Results are available to the applicants via their online profile and also via email notification.